Claims

- 1. An apparatus, comprising:
- a first antenna coupled to a first receiver; and
- a second antenna coupled to a second receiver and having a radiation pattern different than a radiation pattern of the first antenna.
 - 2. The apparatus of claim 1, wherein the first antenna is an omni-directional antenna having a non-directive radiation pattern and wherein the second antenna is a directive antenna having a directive radiation pattern

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- 3. The apparatus of claim 1, wherein the first antenna is a whip antenna, stub antenna, or dipole antenna.
- 4. The apparatus of claim 1, wherein the second antenna is a microstrip15 patch antenna.
 - 5. The apparatus of claim 1, wherein the first receiver comprises a first low noise amplifier (LNA) having an input terminal coupled to the first antenna and wherein the second receiver is separate from the first receiver and comprises a second low noise amplifier (LNA) having an input terminal coupled to the second antenna.
 - 6. The apparatus of claim 1, wherein the first receiver is a direct conversion receiver and wherein the second receiver is a direct conversion receiver.

7. The apparatus of claim 1, further comprising a baseband processor coupled to the first receiver and the second receiver.

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- 8. The apparatus of claim 1, wherein the first antenna receives a first radio frequency (RF) signal and the second antenna receives a second radio frequency (RF) signal that is not correlated to the first signal and further comprising a baseband logic circuit adapted to process the first radio frequency (RF) signal and the second radio frequency (RF) signal to provide interference detection and cancellation.
- 9. The apparatus of claim 1, wherein the first receiver is adapted to down convert a first signal from the first antenna and wherein the second receiver is adapted to down convert a second signal from the second antenna.

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- 10. A system, comprising:
- a wireless wide area network (WWAN) device, comprising:
 - a first antenna coupled to a first receiver; and
- a second antenna coupled to a second receiver and having a radiation pattern different than a radiation pattern of the first antenna.

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- 11. The system of claim 10, wherein the wireless wide area network (WWAN) is a cellular telephone.
- 12. The system of claim 11, wherein at least a portion of the first antenna is external to a housing of the cellular telephone and wherein the second antenna is internal to the housing of the cellular telephone.
 - 13. The system of claim 10, wherein the first antenna is an omni-directional antenna having a non-directive radiation pattern and wherein the second antenna is a directive antenna having a directive radiation pattern.

14. A method, comprising:

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receiving a first signal from a first antenna at the input terminal of a first receiver; and

- receiving a second signal different from the first signal from a second antenna at the input terminal of a second receiver, wherein the radiation pattern of the first antenna is different than the radiation pattern of the second antenna.
 - 15. The method of claim 14, further comprising:
 downconverting the first signal to a first baseband signal; and
 downconverting the first signal to a second baseband signal.

- 16. The method of claim 14, wherein receiving a first signal comprises receiving the first signal from an omni-directional antenna having a non-directive radiation pattern.
- 5 17. The method of claim 16, wherein receiving the first signal from an omnidirectional antenna includes receiving the first signal from a whip antenna.
 - 18. The method of claim 14, wherein receiving a second signal comprises receiving the second signal from a directive antenna having a directive radiation pattern.
 - 19. The method of claim 18, wherein receiving the second signal from a directive antenna comprises receiving the second signal from a microstrip patch antenna.

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